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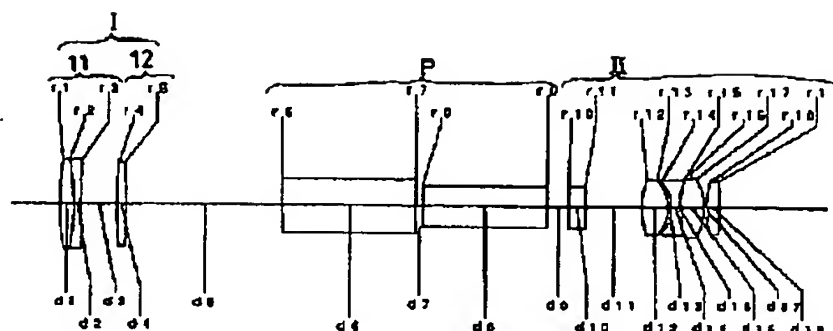
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APPLICANT : ASAHI OPTICAL CO LTD;

INVENTOR : YANO TAKAAKI;

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TITLE : VIBRATION-PROOF OPTICAL SYSTEM
FOR OBSERVATION OPTICAL
EQUIPMENT



ABSTRACT : PROBLEM TO BE SOLVED: To obtain a high-performance vibration-proof optical system made small in size and light in weight and capable of securing space in which a vibration-proof device is placed even in observation optical equipment where the entire length of an objective optical system is made short.

SOLUTION: As for this vibration-proof optical system for the observation optical equipment provided with the objective optical system I, an erect optical system P and an ocular optical system II in this order from the object side, the optical system I is constituted of a front group 11 and a rear group 12 in this order from the object side, the front group 11 is fixed, and the rear group 12 constitutes a vibration-proof lens group having positive power, and the optical system I satisfies conditional expressions: (1) $0.04 < A/f_0 < 0.2$, (2) $0.35 < B/f_0 < 0.5$ and (3) $TL/f_0 > 1.1$. In the above formulas, A is the distance between the vibration-proof lens group and an optical device positioned on the object side thereof, B is the distance between the vibration-proof lens group and an optical device positioned on the eye side thereof, f_0 is the focal distance of the entire objective optical system and TL is the distance from the surface on the object side, of the lens nearest the object side of the objective optical system, to the image surface of the objective optical system.

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